

CLAIMS

What we claim is:

1. A method of locally administering to a tissue or cell a synthetic double stranded RNA comprising nucleotide sequence that is complementary to nucleotide sequence of VEGF or a VEGF receptor encoding RNA or a portion thereof, comprising contacting said tissue or cell with said double stranded RNA under conditions suitable for local administration.
2. The method of claim 1, wherein said tissue is ocular tissue.
3. The method of claim 1, wherein said cell is an ocular cell.
4. The method of claim 2, wherein said ocular tissue is retinal tissue.
5. The method of claim 3, wherein said ocular cell is a retinal cell.
6. The method of claim 1, wherein said double stranded RNA is administered to said tissue or cell via injection.
7. The method of claim 6, wherein said injection comprises intraocular injection.
8. The method of claim 1, wherein said VEGF receptor is VEGFR1.
9. The method of claim 1, wherein said VEGF receptor is VEGFR2.
10. The method of claim 1, wherein said double stranded RNA is chemically synthesized.
11. The method of claim 1, wherein said double stranded RNA comprises at least one nucleic acid sugar modification.
12. The method of claim 11, wherein said sugar modification comprises a 2'-deoxy-2'-fluoro modification.
13. The method of claim 11, wherein said sugar modification comprises a 2'-deoxy modification.

14. The method of claim 11, wherein said sugar modification comprises a 2'-O-alkyl modification.
15. The method of claim 14, wherein said 2'-O-alkyl modification is 2'-O-methyl.
16. The method of claim 14, wherein said 2'-O-alkyl modification is 2'-O-allyl.
17. The method of claim 1, wherein said double stranded RNA comprises at least one nucleic acid base modification.
18. The method of claim 1, wherein said double stranded RNA comprises at least one nucleic acid backbone modification.
19. The method of claim 18, wherein said backbone modification comprises a phosphorothioate internucleotide linkage.
20. The method of claim 1, wherein said double stranded RNA comprises at least one non-nucleotide.
21. The method of claim 20, wherein said non-nucleotide comprises an abasic moiety.
22. The method of claim 21, wherein said abasic moiety is present at the 3'-end, 5'-end, or both 3'- and 5'-ends of at least one strand of the double stranded RNA.
23. The method of claim 1, wherein said double stranded RNA comprises a cap structure at the 3'-end, 5'-end, or both 3'- and 5'-ends of at least one strand of the double stranded RNA.
24. The method of claim 23, wherein said cap structure is an inverted nucleotide.
25. The method of claim 23, wherein said cap structure is an inverted abasic moiety.
26. The method of claim 25, wherein said inverted abasic moiety is an inverted deoxyabasic moiety.